

COURSE: Prescribed Fire Planning and Implementation

TOPIC: Smoke Management

LESSON B: Quantifying and Achieving Smoke Management Objectives

SUPPLEMENTAL MATERIAL 3: Smoke Management Forecasts

- I. A forecast that advises fire managers of the atmospheric conditions for the next 12 to 36 hours that will affect the dispersal of pollutants from the fire.
- II. Smoke management forecasts may be issued as a separate forecast product, and/or may be issued only once daily.
- III. Forecast format and content varies across the country. Listed below are examples of parameters and terms used in smoke management forecasts.
 - Airmass stability
 - Mixing height or depth
 - Inversion strength, depth, elevation, and dissipation time if applicable
 - Elevation at which layering of smoke is likely
 - Transport wind speed and direction
 - Forecast winds at specific altitudes
 - Descriptive terms, i.e., poor, fair, good, excellent dispersion
 - Ventilation index
- IV. Smoke management forecasts are often appended to the regular fire weather or land management forecast. At user request, they may be included in spot forecasts. Contact your NWS for information on how to obtain this product.